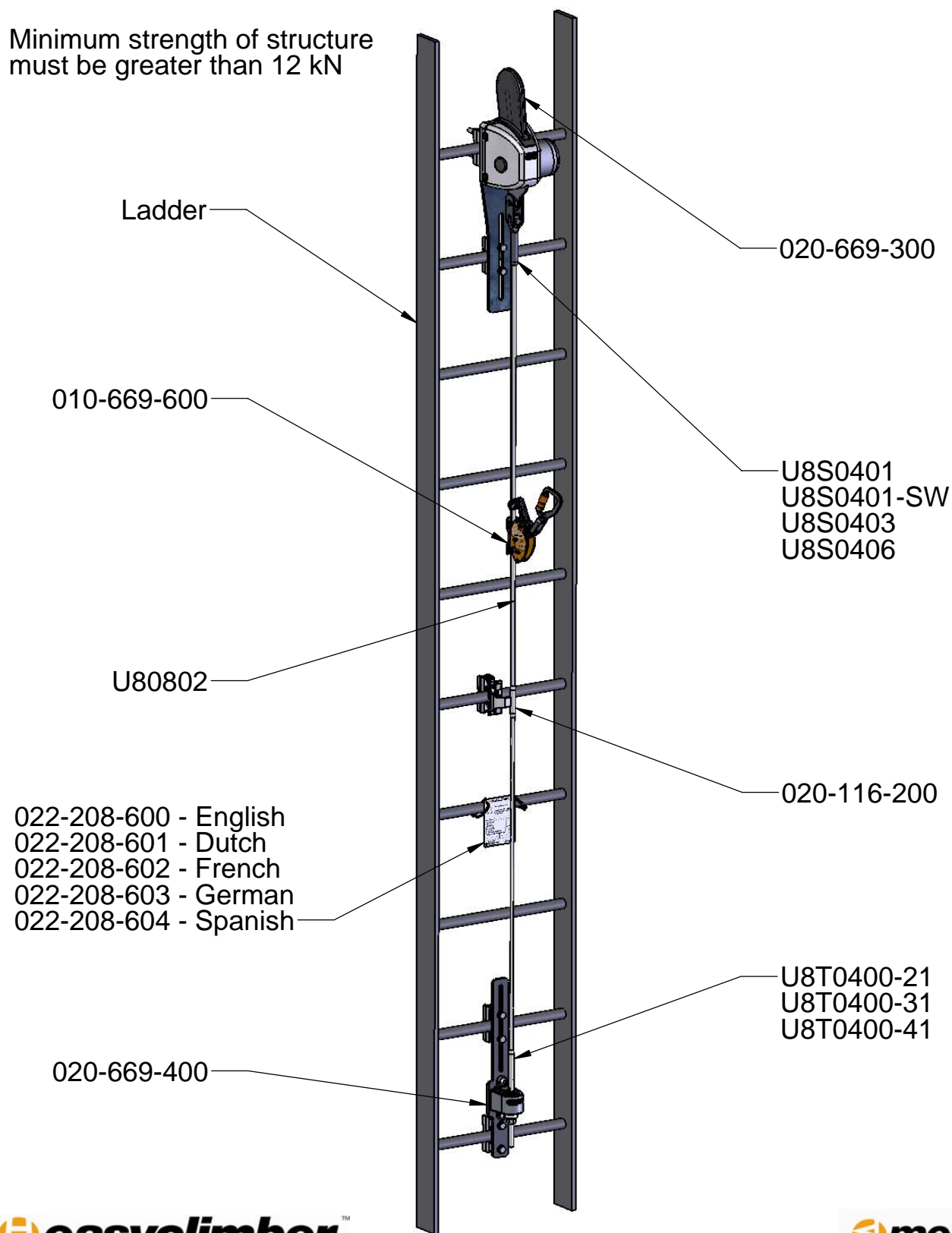


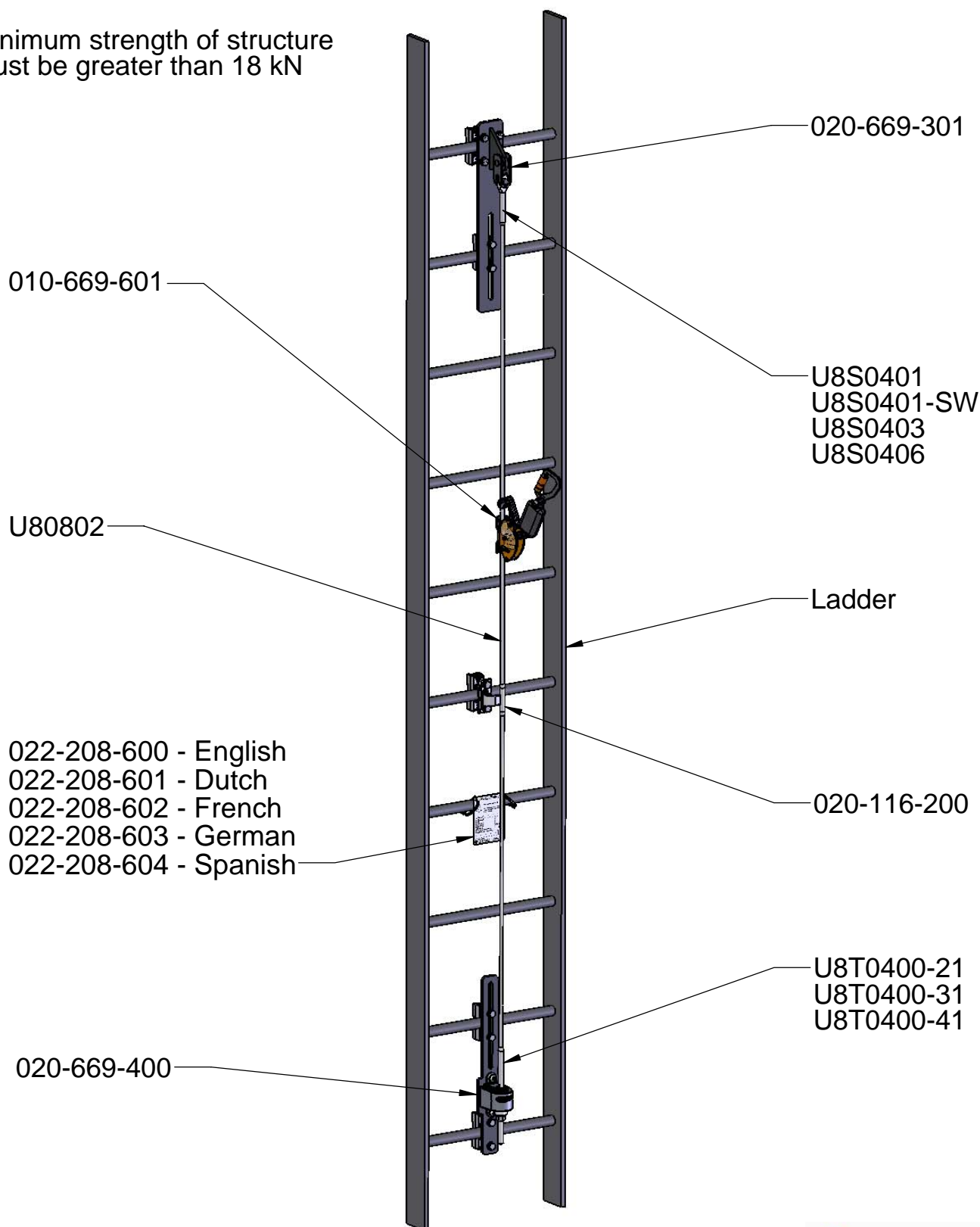
## EasyClimber Rung Mounted System with Line Energy Absorber

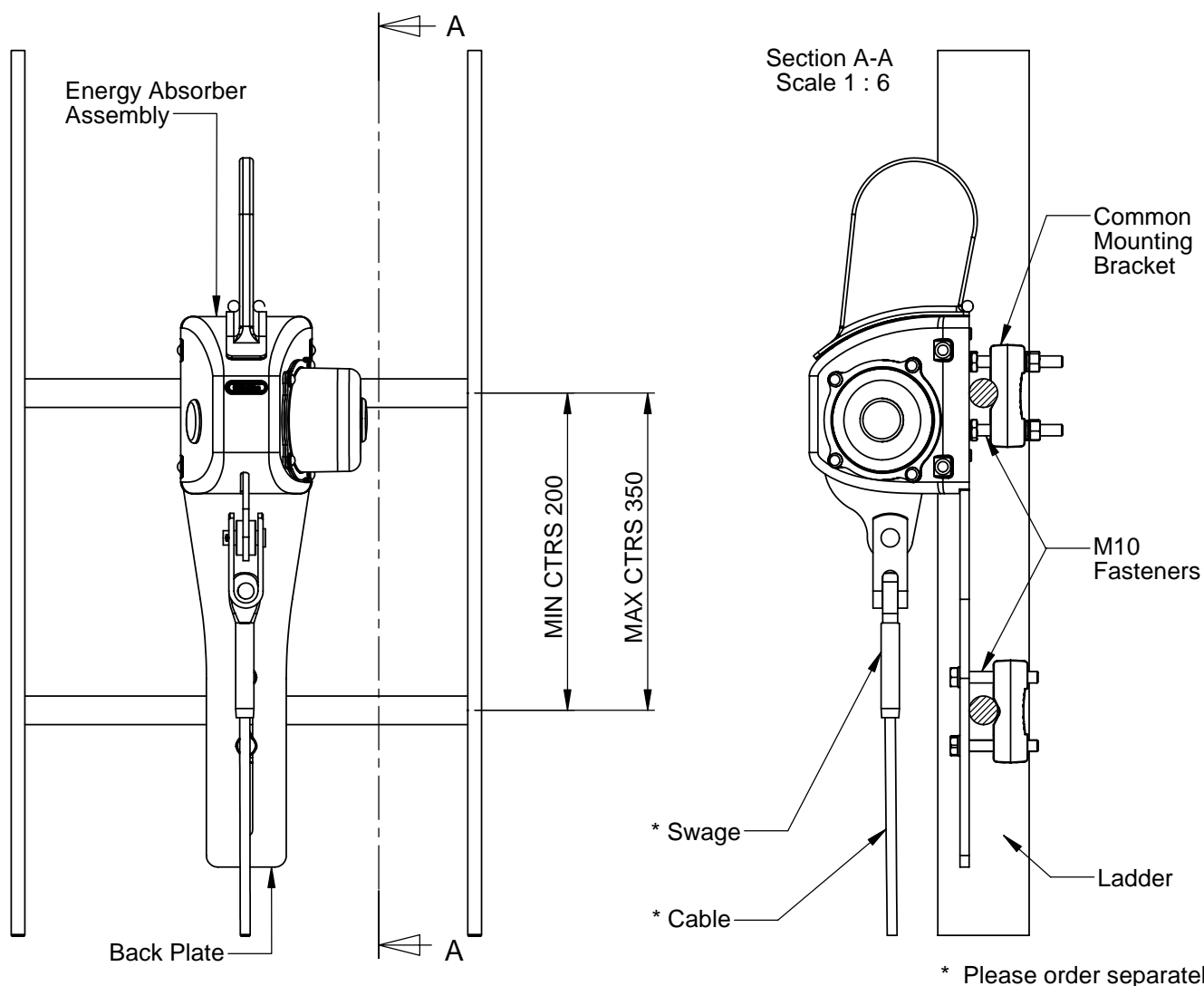
Minimum strength of structure must be greater than 12 kN



## EasyClimber Rung Mounted System without Line Energy Absorber

Minimum strength of structure must be greater than 18 kN





### Energy Absorber Data

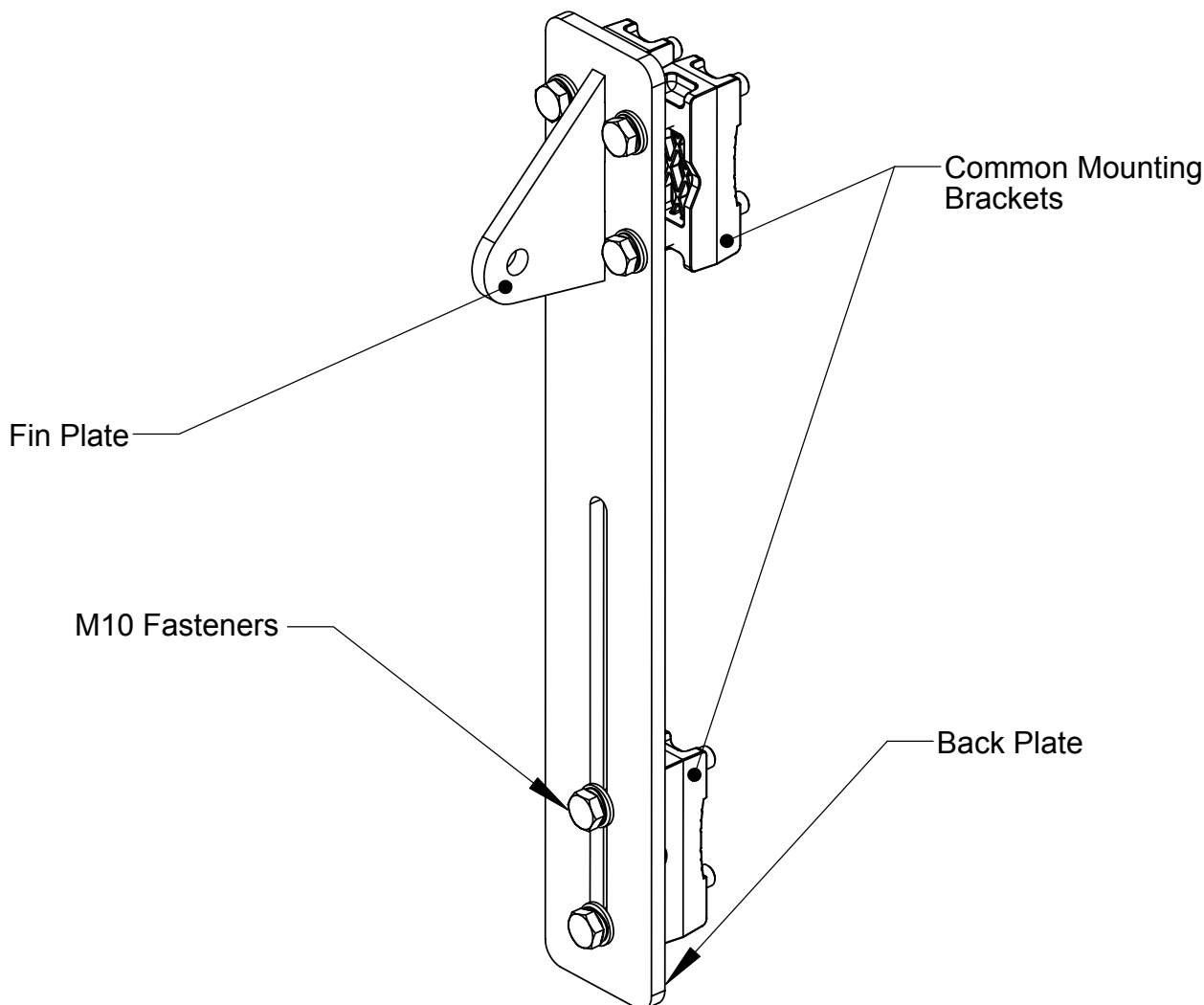
The energy absorber is design to be mounted across two rungs of the ladder. It can be mounted on both round (12 - 30mm dia) and square ladder rungs (20 - 40mm) using a common bracket. The ladder which is being considered should be capable of withstanding fall arrest loads of 12kN, in turn the energy absorber will limit the fall load on the structure and the user to less than 6kN as advised in EN353:1. The back plate design allows the energy absorber to be fitted to a range of ladders that have a rung spacing between 200 to 350mm centres.

### Component Specification

	Back Plate	Spring Assembly	Absorber Fin	Weather Cover	Fasteners
Material	Mild Steel	Steel / Acetal / Ph. Bronze	Stainless Steel	ABS / PVC	Steel
Finish	H.D Galvanized	Spin Galv / Natural / Powder Coated	Electropolished	Natural	H.D Galvanized
Quality	100% Visual Inspection				
Strength	Minimum 15kN				
Approvals	EN 353-1				

## Rung Mount Top Anchor Including Clamps

Part No: 020-669-301

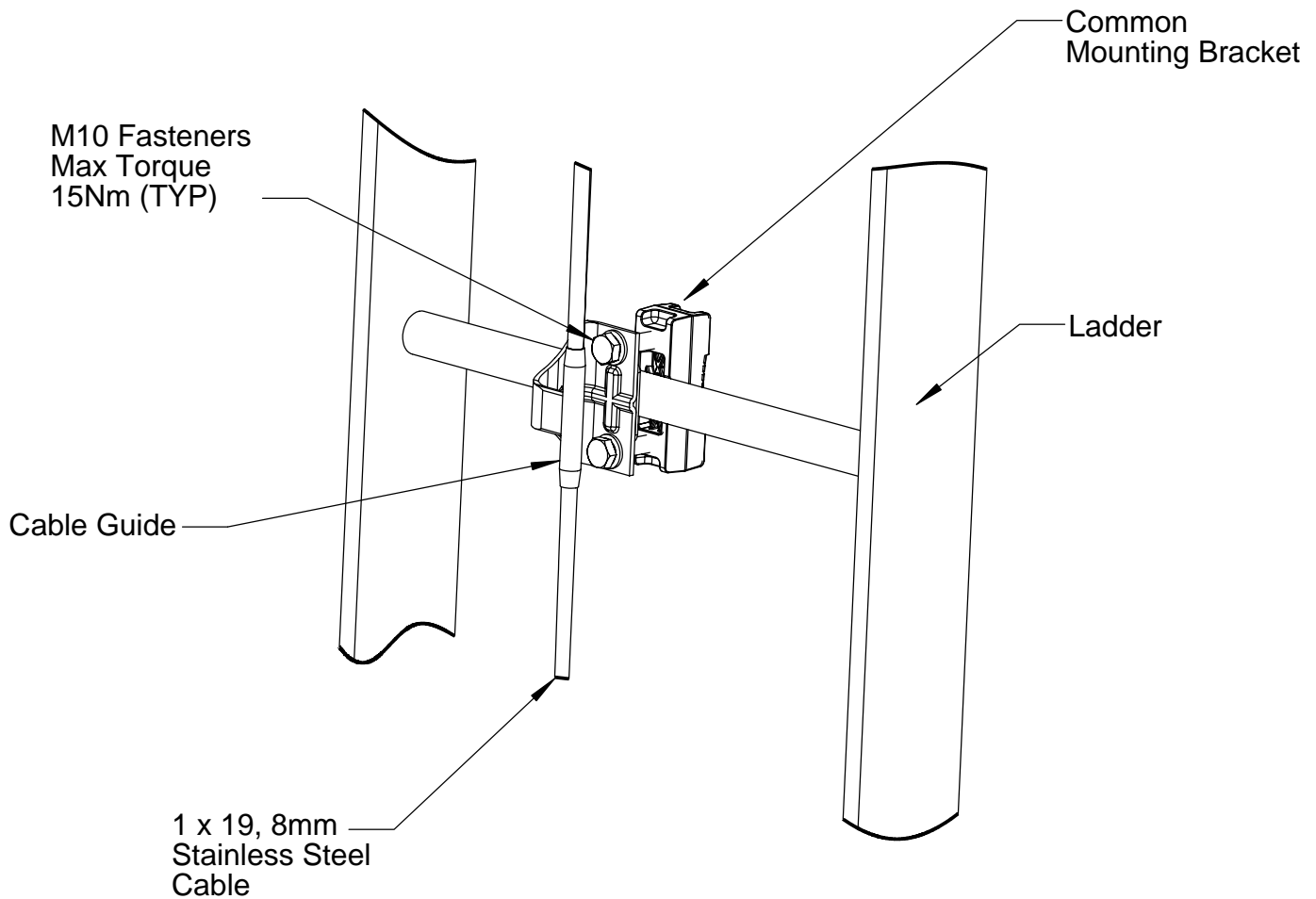


### Top Anchor Data

The Top Anchor is design to be mounted across two rungs of the ladder. It can be mounted on both round (12 - 30mm dia) and square ladder rungs (20 - 40mm) using a common bracket. The ladder which is being considered should be capable of withstanding fall arrest loads of 12kN. The back plate design allows the energy absorber to be fitted to a range of ladders that have a rung spacing between 200 to 350mm centres.

### Component Specification

	Back Plate & Fin Plate	Cast Brackets
Material	Mild Steel	Zinc Alloy
Finish	Spin Galvanized	Natural
Quality	100% Visual Inspection	
Strength	Minimum 15kN	
Approvals	EN 353-1	



### Intermediate Bracket Assembly Data

The intermediate bracket assembly can be fitted to both round (12 -30mm dia) and square rungs (20 - 40mm ). The cable guide has been designed to allow easy passage of the Monkey (Fall Arrestor). The Common Mounting Bracket has two tapped holes in to allow the assembly to be fixed on to a single rung in two simple operations from the front of the ladder.

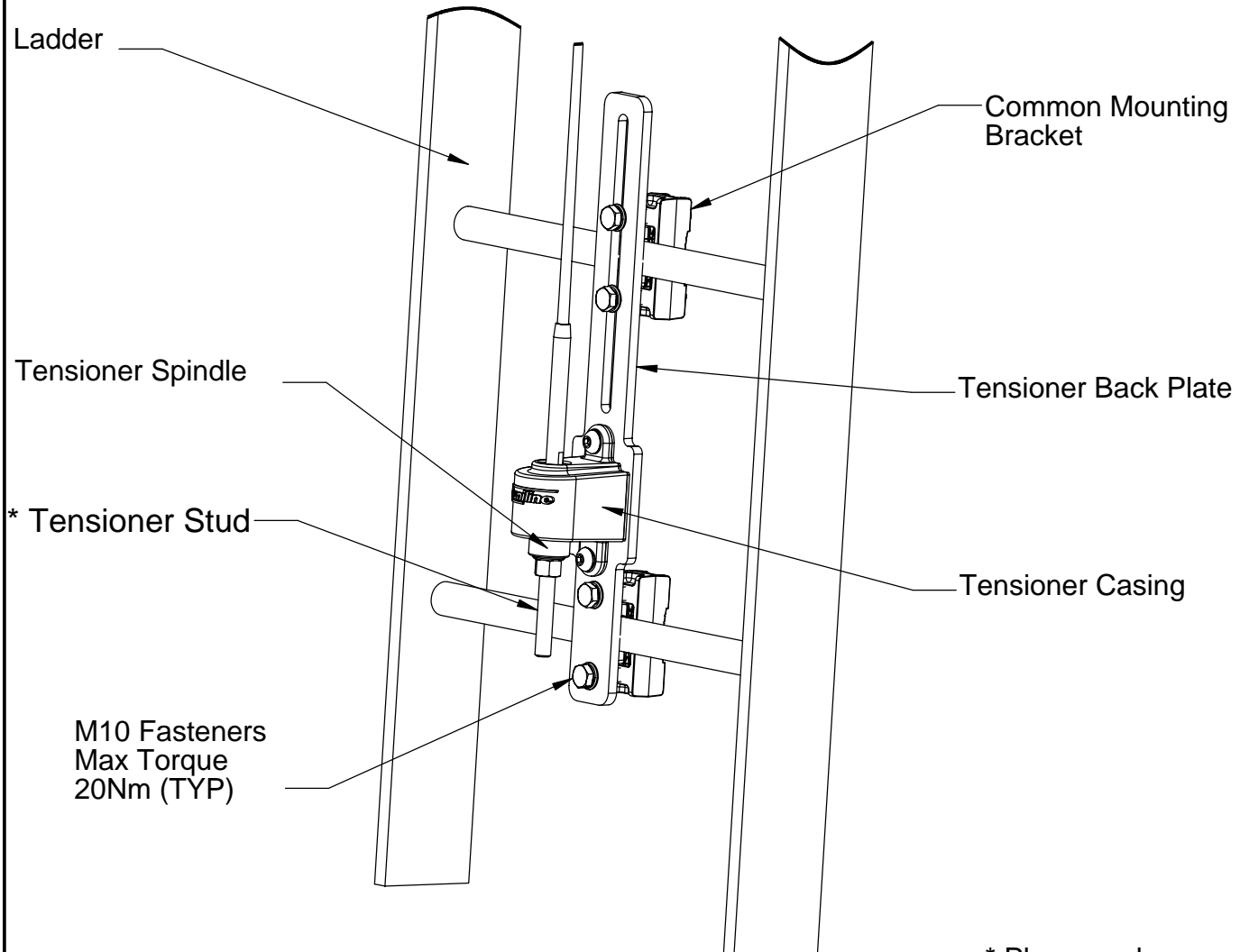
Note; Isolation pads are provided to isolate the cable guide from the galvanized ladder.

### Component Specification

	Cable Guide	Common Mounting Bracket	Fasteners
Material	316 Stainless Steel	Zinc Alloy	Steel
Finish	Electropolished	Natural	H.D Galvanizing
Quality	100% Visual Inspection		
Strength	Minimum 6 kN		
Approvals	N/A		

## Rung Mount Tensioner Unit inc Clamps

Part No: 020-669-400



### Tensioner Assembly Data

The tensioner assembly can be fitted to both round (12 -30mm dia) & square rungs (20 - 40mm ).

As the system is tensioned the indicator spindle moves up through the tensioner casing. The correct tension (1kN) is indicated by a white silicone ring on the indicator spindle. The system is tensioned correctly when the complete coloured ring is just clear of the machined bore. The back plate design allows the energy absorber to be fitted to a range of ladders that have a rung spacing between 200 to 350mm.

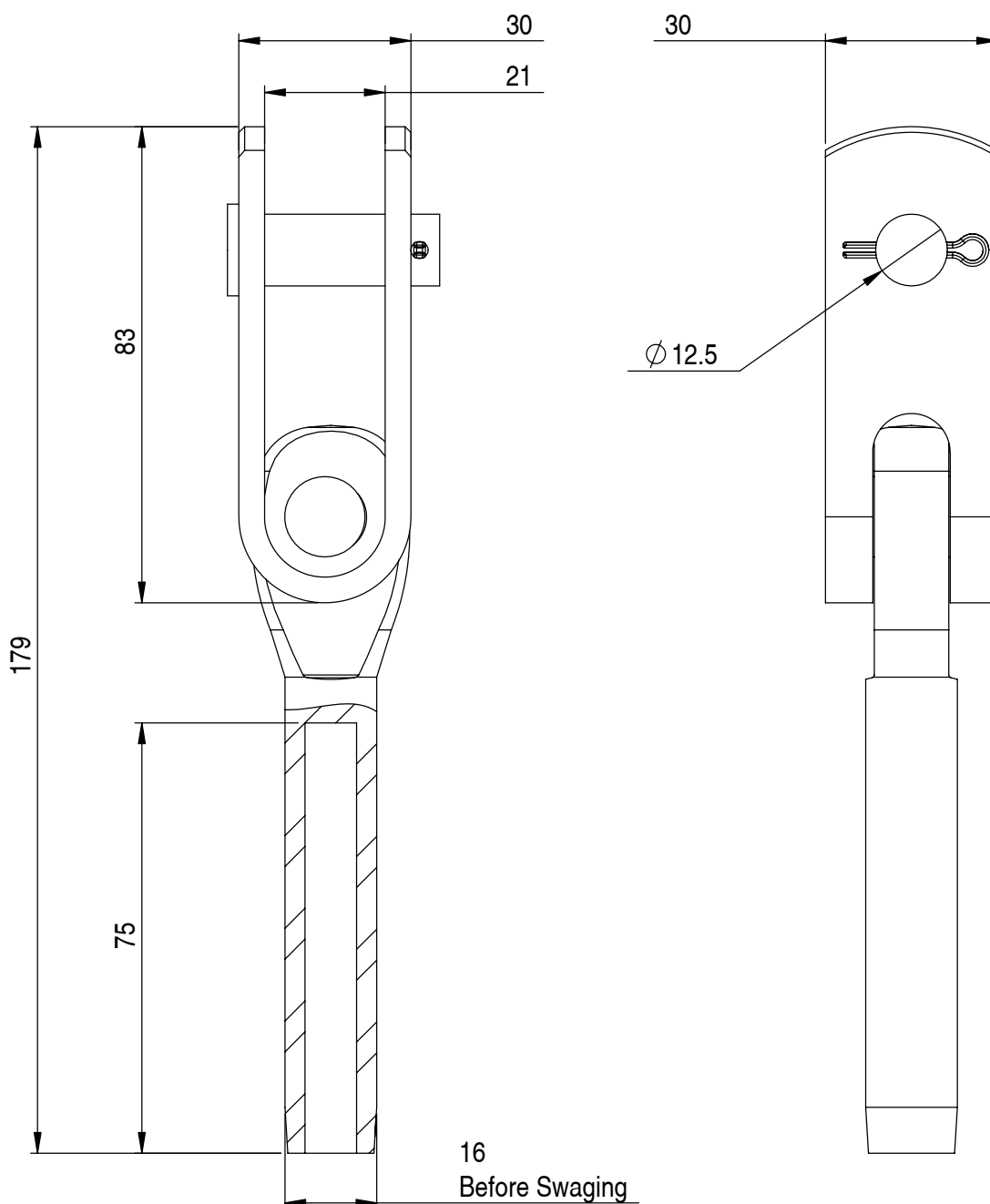
Note: Casting is sealed & isolated from the backplate with a gasket.

### Component Specification

	Tensioner Casting	Back Plate	Back Indicator Spindle & Spring	Fasteners
Material	Aluminium Alloy	Steel	Acetal / Steel	Steel
Finish	Powder Coated	H.D Galvanized	Natural / Zinc & Yellow Passivate	H.D Galvanized
Quality	100% Visual Inspection			
Strength	Minimum 6 kN			
Approvals	N/A			

## Uni 8 - Roll Swage Toggle

Part: U8S0401



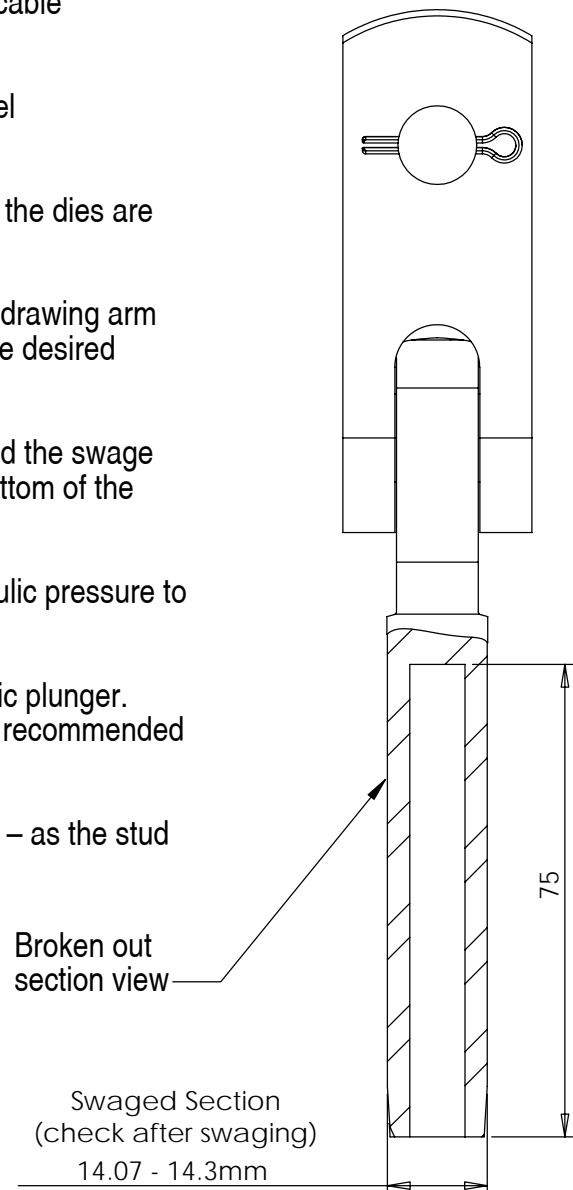
### Component Specification

Material	316 Stainless Steel
Finish	Natural
Quality	100% Visual Inspection
Strength	18kN max permitted arrest load, min break strength 36kN
Approvals	EN795 Class C & EN353-1
Application	For use with $\phi 8\text{mm}$ 1x19 or 7x7 wire only

## Uni 8 - Roll Swage Toggle

Part No: U8S0401

1. Only Ø 8mm 1x19 or 7x7 construction stainless steel wire cable approved by Uniline may be used. (system specific).
2. Insert the pair of roller dies for 8mm cable into the cogwheel synchronising pins of the swaging machine.
3. Ensure that the hydraulic plunger is fully retracted and that the dies are positioned so that the arrow points in the swaging direction.
4. Attach the swage terminal to the appropriate fixture on the drawing arm so that the roller dies meet on the swage terminal shank at the desired position.
5. Apply just enough hydraulic pressure so that the rollers hold the swage terminal firmly. Mark the cable to length and insert into the bottom of the terminal throat.
6. Put the transparent guard in position and then apply hydraulic pressure to draw the terminals between the roller dies.
7. After swaging, open the roller dies and release the hydraulic plunger. Measure the diameter of the swaged area and check against recommended dimension of approximately 14.07 mm.
8. DO NOT swage any further than 70mm in to the connector – as the stud becomes solid after this point

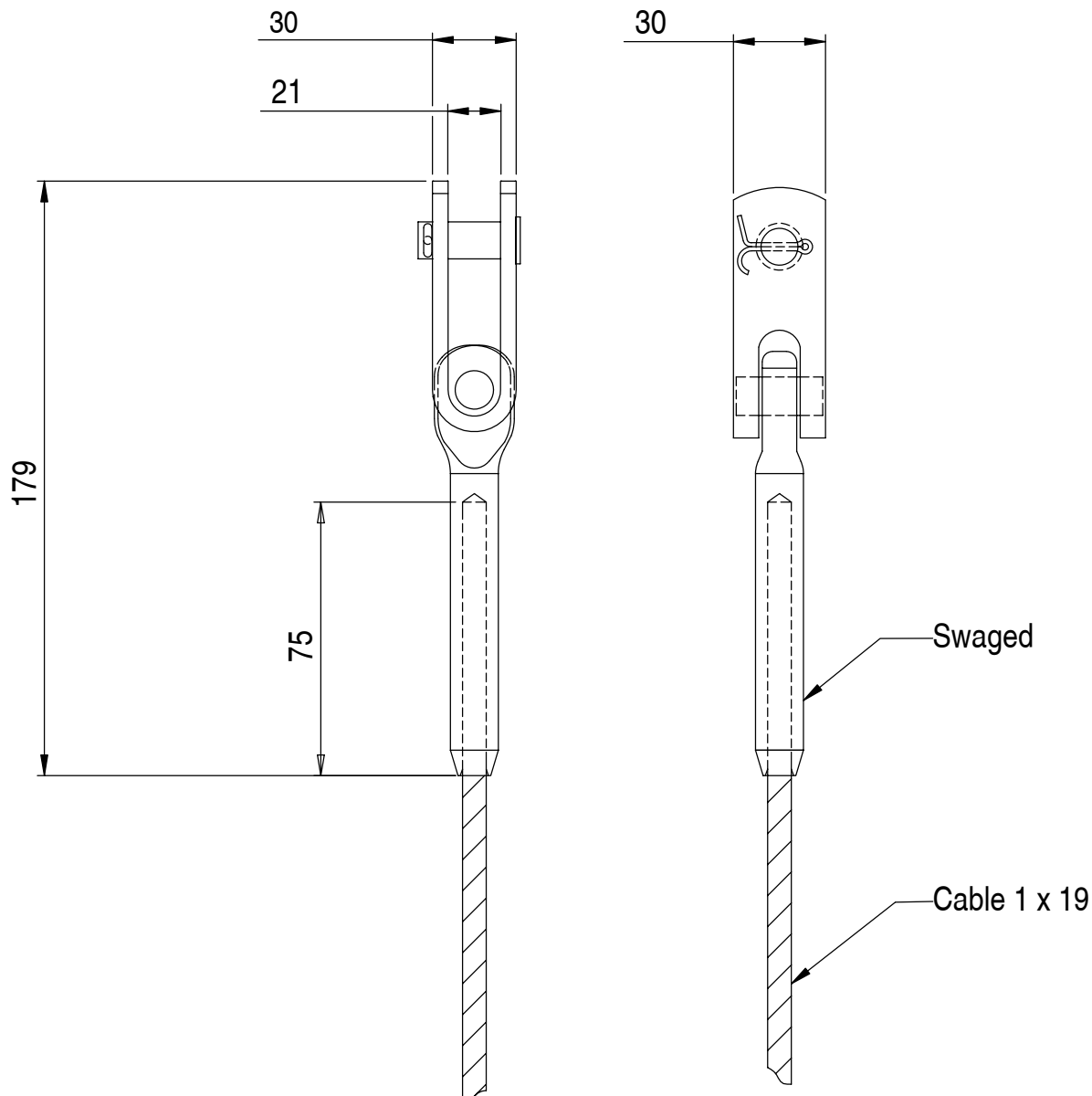


## Swage Machine Specification

Manufacturer	Wiretechnik
Model	Type A-250
Size	5/16" Dash 10
Contact	Tel: + (0)46 86436733 - <a href="http://www.wiretechnik.se">www.wiretechnik.se</a>

## Roll Swage Toggle + 1st metre of 1 x 19 Cable

Part: U8S0401-SW



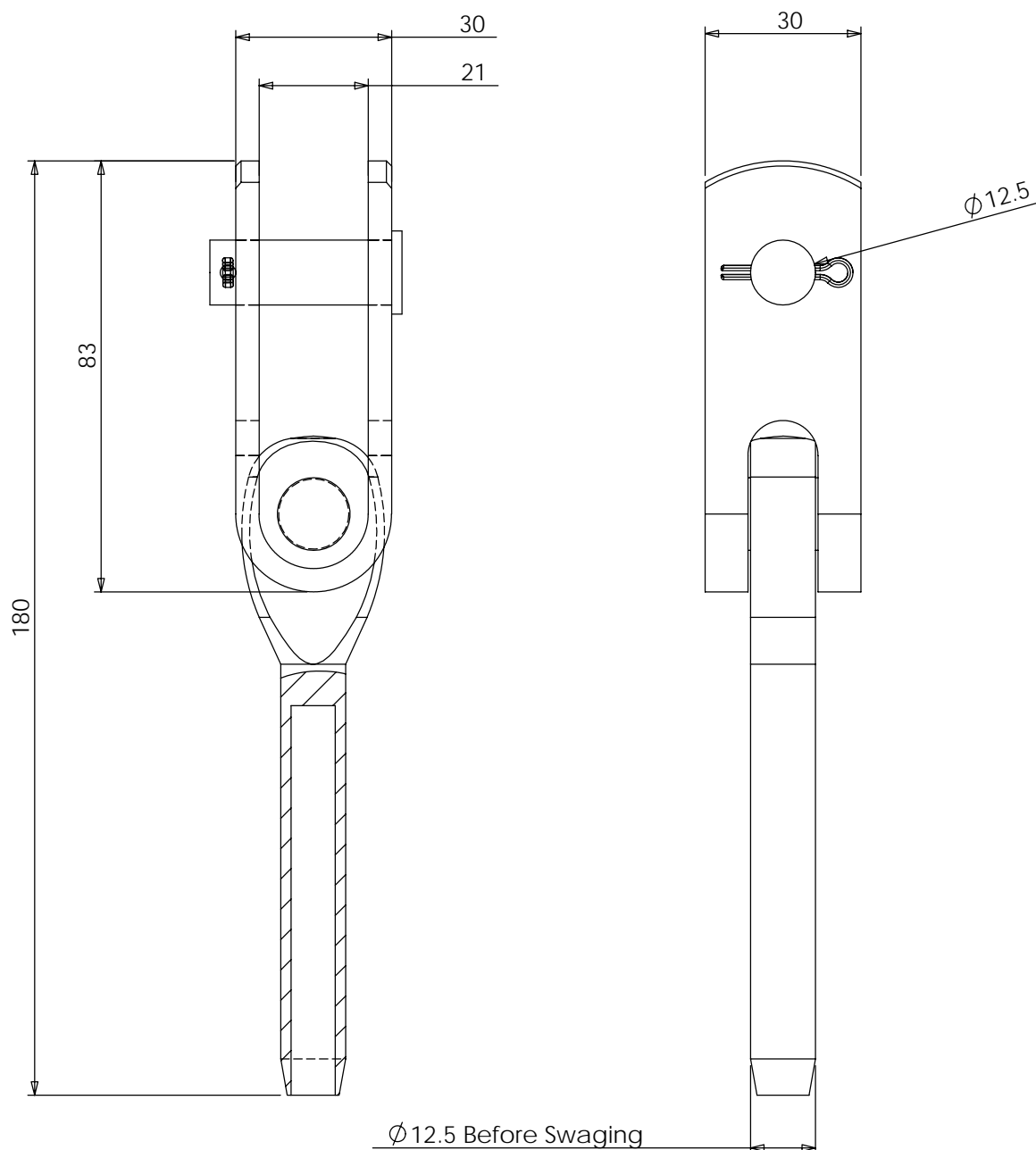
When ordering a pre-swaged system order 1 x U8S0401-SW, plus the required XXm of U80802 (1x19 Stainless Steel Cable). For cable information, refer to Technical Datasheet 925.

### Component Specification

	Toggle
Material	316 Stainless Steel
Finish	Natural
Quality	100% Visual and dimensional test.
Strength	18kN maximum permitted arrest load, minimum break strength 36 kN.
Approvals	EN353-1

## Uni 8 - Hex Swage Toggle

Part: U8S0403



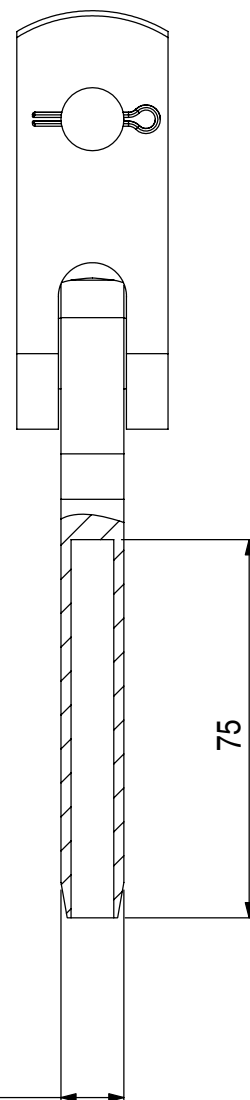
## Component Specification

Material	316 Stainless Steel
Finish	Natural
Quality	100% Visual Inspection
Strength	18kN max permitted arrest load, min break strength 36kN
Approvals	EN795 Class C & EN353-1
Application	For use with $\phi 8$ mm 1 x 19 or 7 x 7 wire only

## Uni 8 - Swaging Instructions

Part: U8S0403

1. Stainless steel swage terminations can only be used in conjunction with approved stainless steel wire cable.
2. Only Ø 8mm 1x19 or 7 x 7 construction stainless steel wire cable approved by Uniline may be used.
3. 6mm hexagonal form dies must be used to swage the cable in 6 dis-continuous 'bites' to give a dimension of 10.7 to 11mm across flats after swaging.
4. To achieve a dis-continuous swage using hexagonal 'bite' form dies, the 'bites' must not be overlapped.
5. In order to ensure full compression of the housing material when swaging, the dies must fully mate together. Check each swage with a vernier to ensure it measures between 10.7 to 11.1mm
6. DO NOT swage further than 70mm into the connector - as the stud becomes solid after this point.



Swaged Section

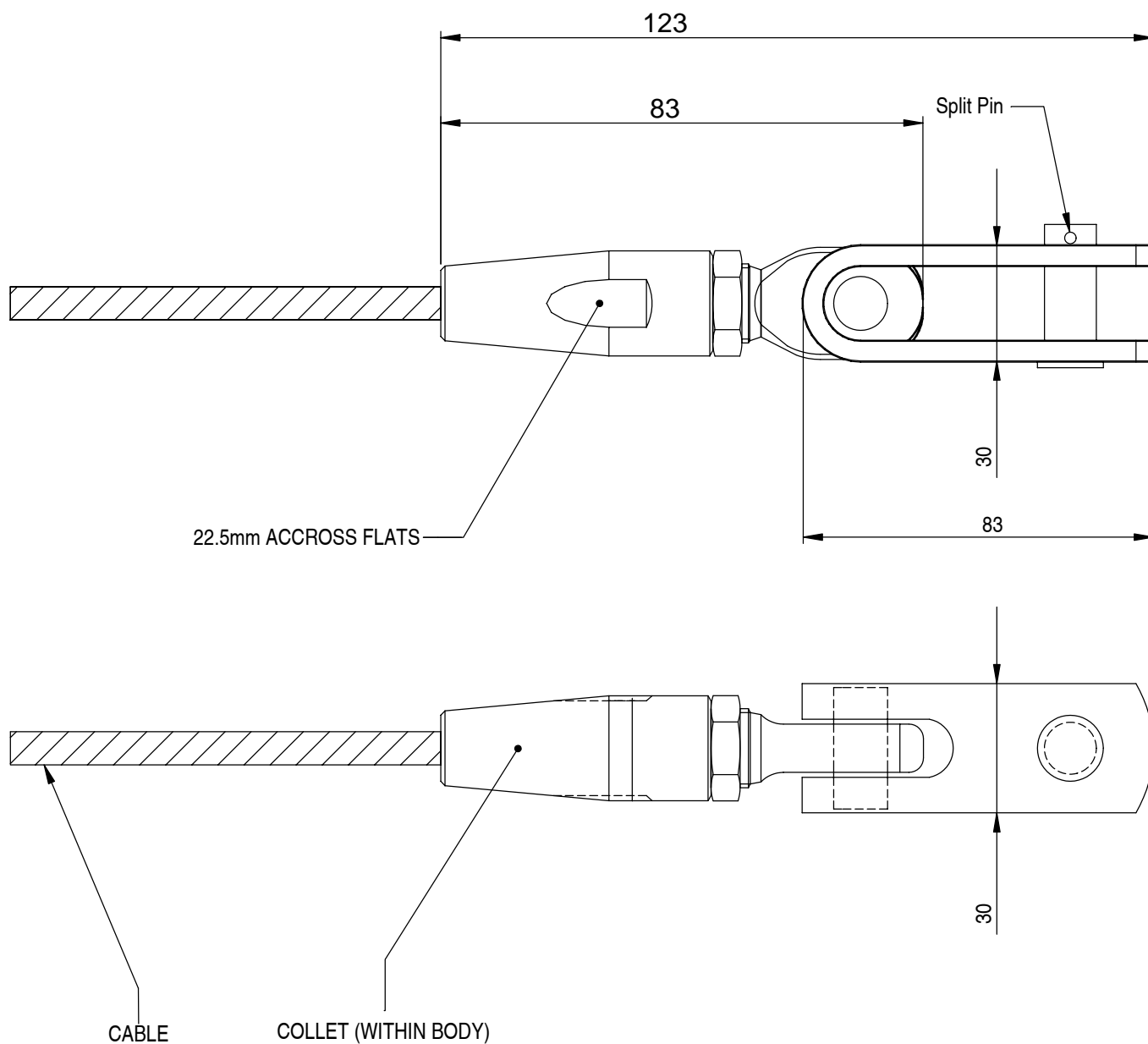
( check after swaged )  
10.7 to 11.1

## Manual Swaging Specification

Manufacturer	Izumi Products Co.
Model	EP-410
Contact	Izumi Products Uk Ltd, Tel: 01388 777132
Dies	Model: 12/05/10

## Uni 8 Swageless Toggle

Part: U8S0406



### Component Specification

Material	316 Stainless Steel
Finish	Machined
Quality	100% Visual Inspection
Strength	Batch Test Strength - minimum 38kN
Approvals	EN 795 Class C + EN 353-1
Applications	For use with $\phi$ 8mm 1x19mm or 7x7 wire only

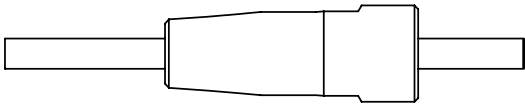
## Uni 8 Swageless Toggle

Part: U8S0406

### Assembly Instructions

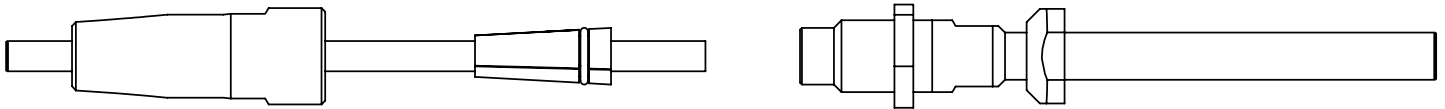
1 - It is advisable to ensure that the end of the wire rope is cut as neatly and evenly as possible before starting to attach any swage-less termination. At all times take care when handling the wire rope and the groups of strands, avoid kinking or un-laying of individual strands from their group.

2 - Unscrew the end fitting from the body and remove the tri-cone collet assembly. Slide the body over the wire rope as shown (right).

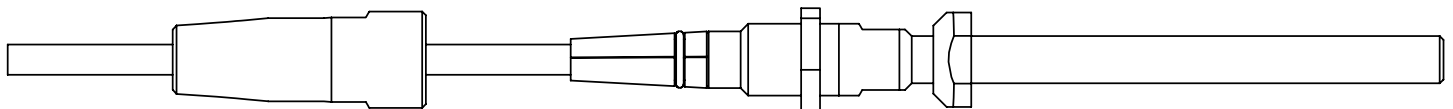


3 - Slide the tri-cone collet assembly (with the rubber retaining ring in place) over the outside of the wire.

4 - Push the tri-cone collet assembly down the wire approximately 30mm using the end fitting to ensure that the wire touches the bottom of the locating hole.



5 - Locate the end connector fitting over the protruding end of the wire rope. When the cable has located fully, the tri-cone collet assembly should sit against the end connector and it should not be possible to engage the wire any further.



6 - Slide the body up the cable and start to thread the two together. Tighten this as far as possible by hand.

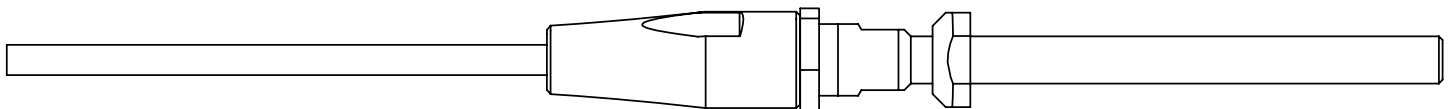
7 - Once the fitting is hand tight, clamp the outer body and use a spanner to tighten the end fitting until this is done up firmly.

8 - Unscrew the assembly and visually inspect to ensure that the cone is seated properly in the main body.

9 - A non corrosive marine grade sealant should be applied to the blind hole in the end fitting and inside the body. This sealant should **NOT** contain acetic acid - Dow Corning 744 is recommended.

10 - The assembly should now be reassembled and re-tightened. It is usual that sealant can be seen to emerge from the cable entrance in the body. Wipe away any excess sealant.

11 - The Locking Nut should then be tightened up until it is firmly against the main body of the fitting.



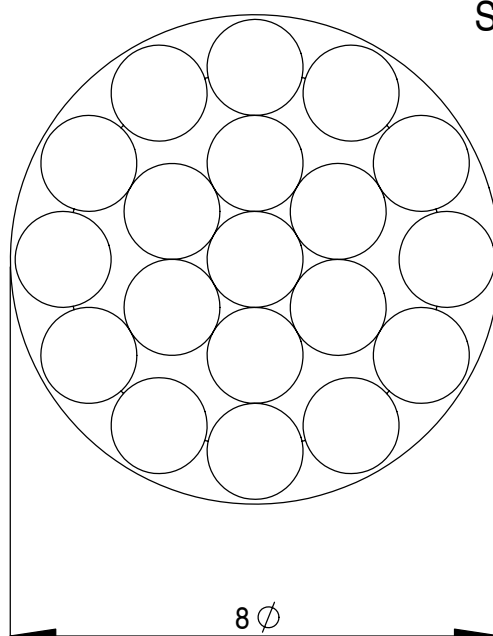
## Uni 8 1 x 19 Stainless Steel Cable

Part: U80802

For use in vertical fall arrest systems and overhead Uni-8 horizontal lifeline systems. A higher level of rigidity means that 1 x 19 cable deflects less than conventional 7 x 7 wire cable and provides a smoother travelling surface for attachment device.

In an overhead application the wire is to be set to a pre-tension of 5kN to reduce static deflection and increase the span length.

SECTIONAL VIEW



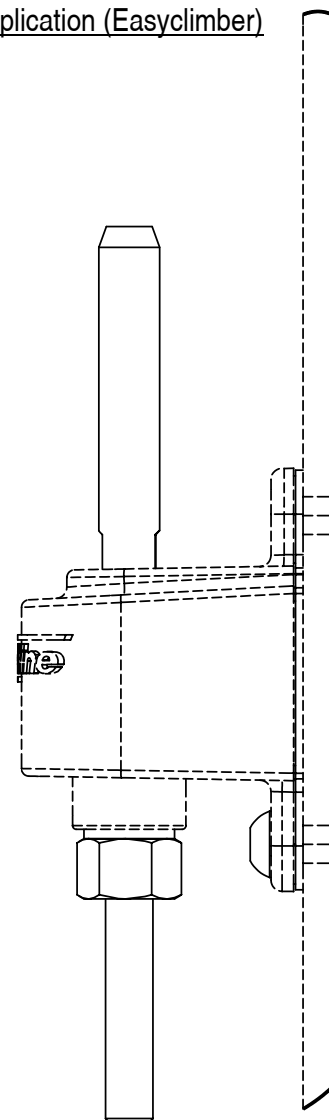
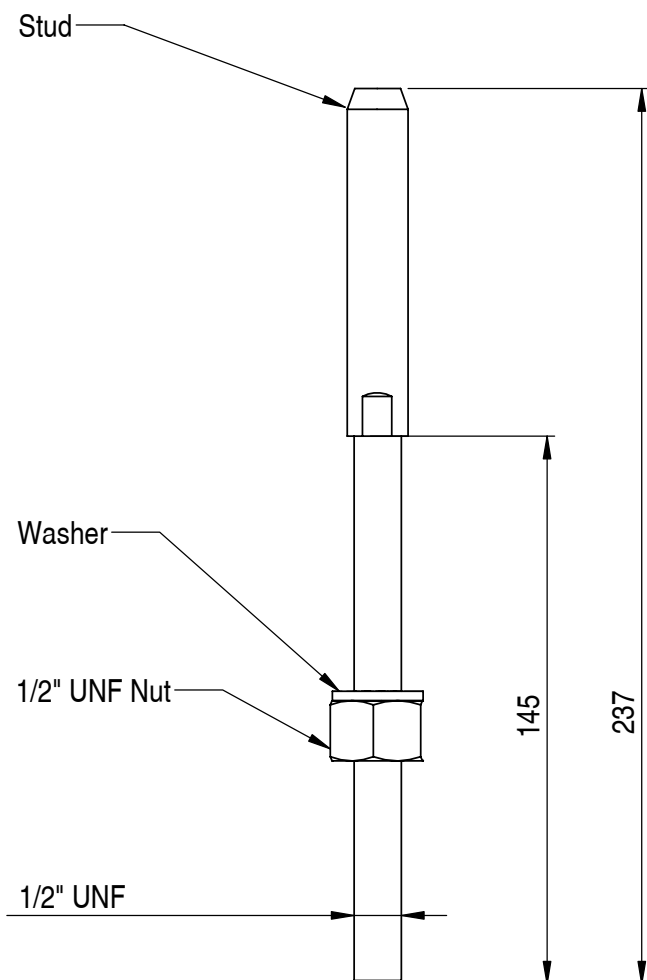
## Component Specification

	Cable
Material	316 Stainless Steel
Weight	31.20 kg/100m
Quality	Batch Tested & 100% Visual Inspection
Strength	Minimum break strength 45.5kN Maximum permitted load in application 18kN
Approvals	N/A

## Roll Swage Tensioning Stud & Nut

Part No: U8T0400-21

### Typical Application (Easyclimber)



\* For roll swage instructions refer to sheet 947. For use with 8mm 1x19 cable.

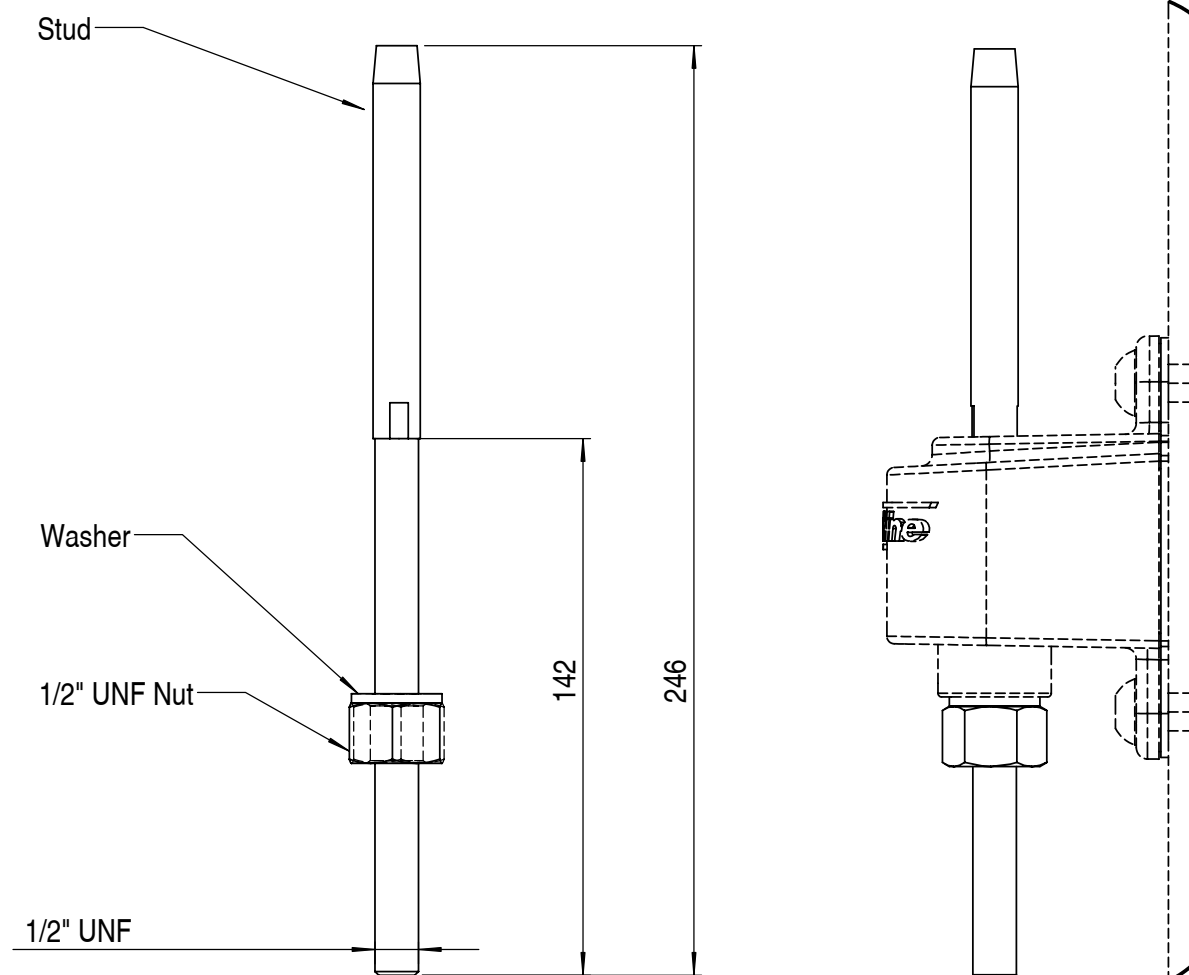
### Component Specification

Material	316 Stainless Steel
Finish	Machined
Quality	100% Visual Inspection
Strength	< 6kN Not to be used as an end anchor in a horizontal lifeline
Approvals	EN353-1
Application	Easyclimber

## Hex Swage Tensioning Stud & Nut

Part No: U8T0400-31

### Typical Application (Easyclimber)



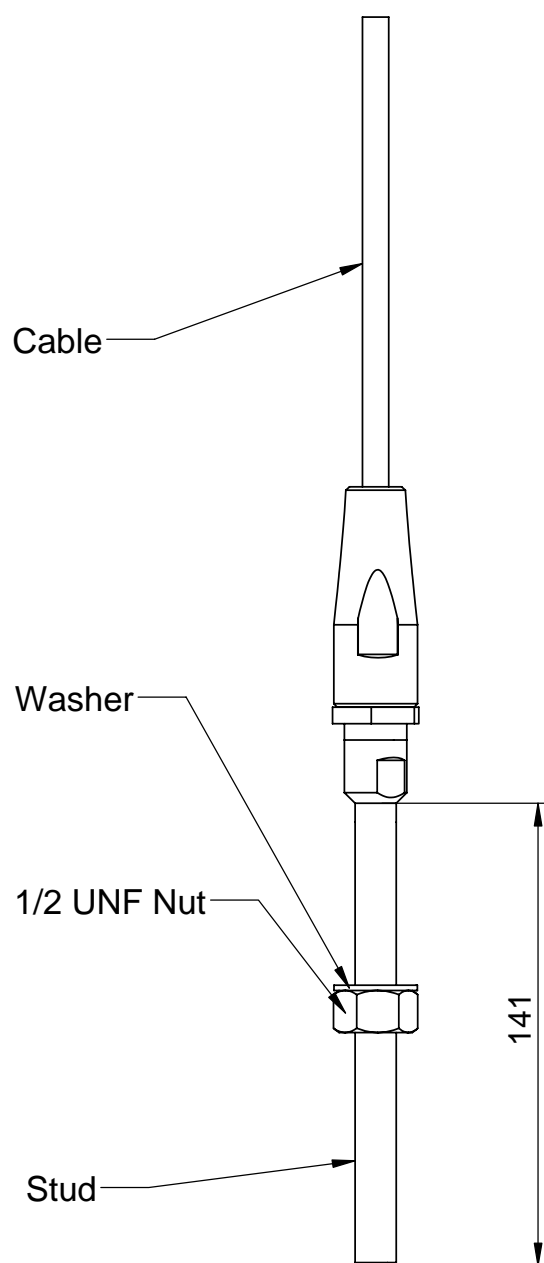
\* Refer to page 906 for swaging instructions. For use with 8mm 1x19 cable.

### Component Application

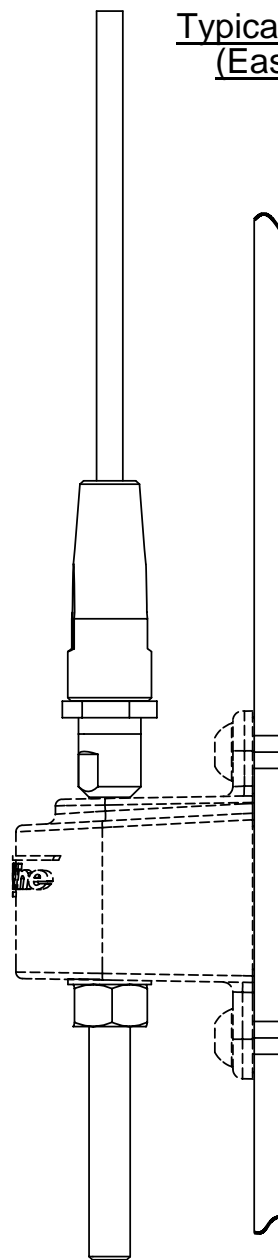
Material	316 Stainless Steel
Finish	Machined
Quality	100% Visual Inspection
Strength	< 6kN Not to be used as an end anchor in a horizontal lifeline
Approvals	EN353-1
Application	Easyclimber

## Easyclimber Swageless Tensioning Stud and Nut

Part No: U8T0400-41



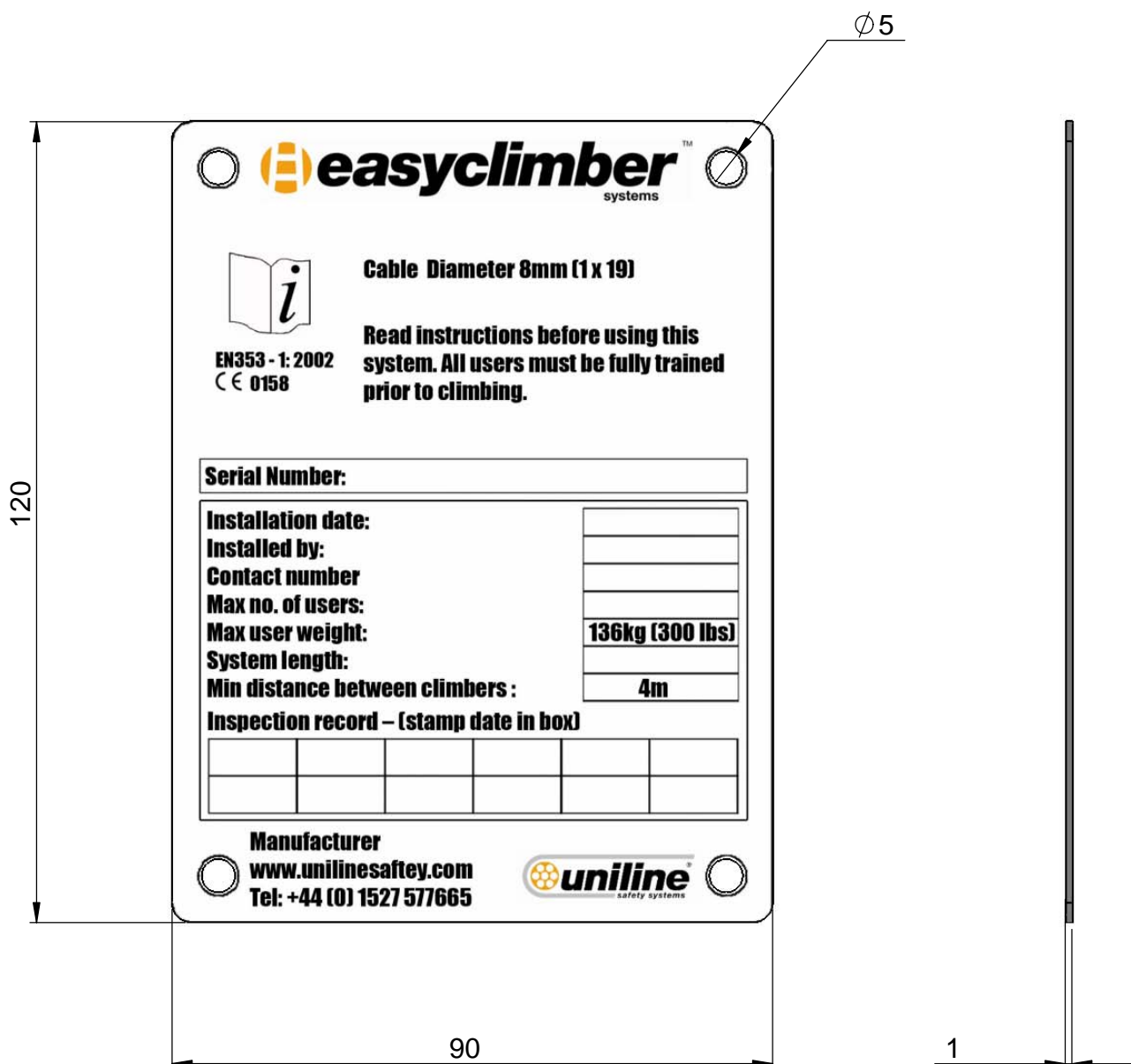
### Typical Application (Easyclimber)



\* Refer to technical datasheet 959 for assembly and installation instructions

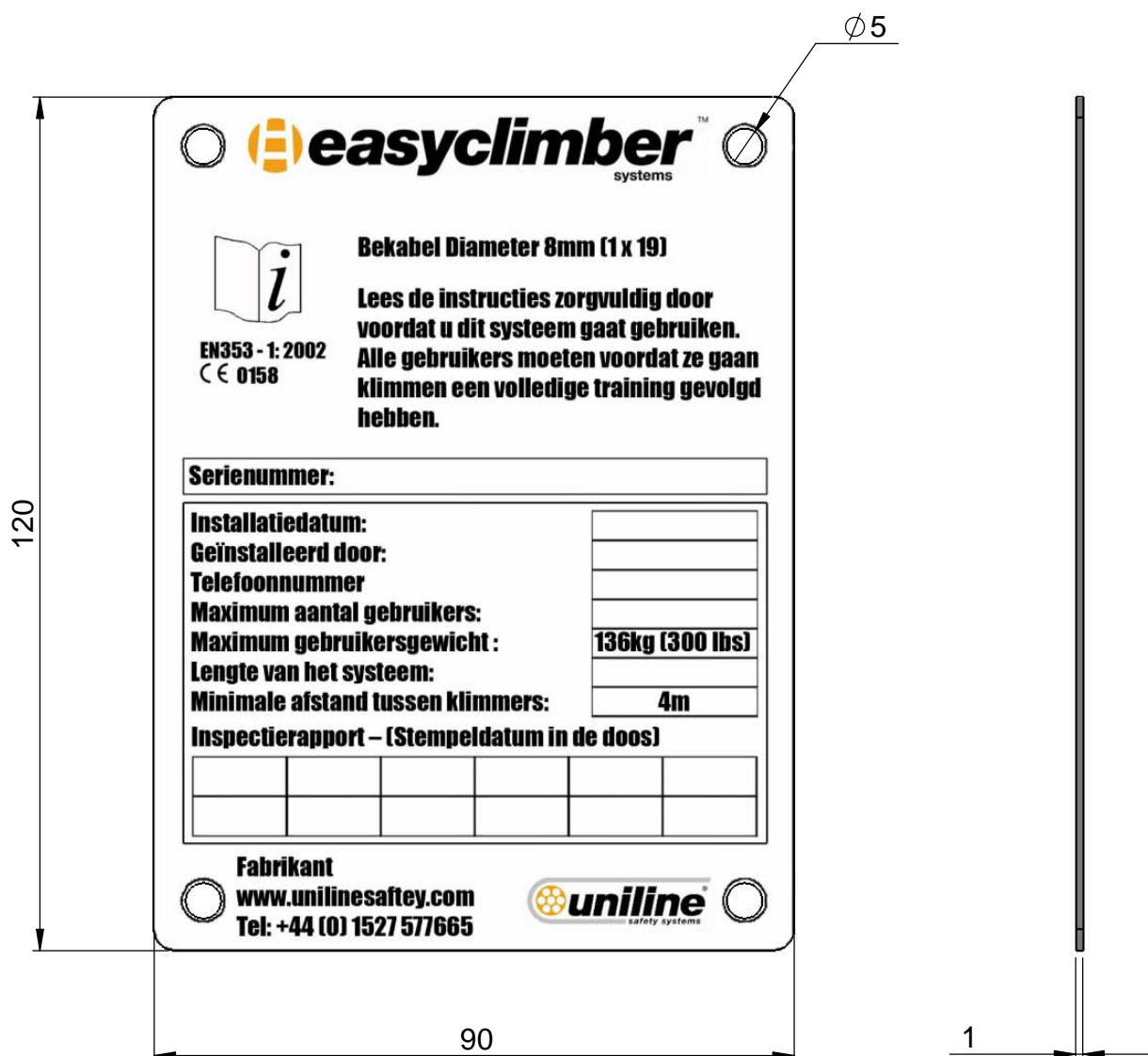
### Component Specification

Material	316 Stainless Steel
Finish	Machined
Quality	100% Visual inspection
Strength	< 6kN Not to be used as an end anchor in a horizontal lifeline
Approvals	EN353-1
Application	Easyclimber



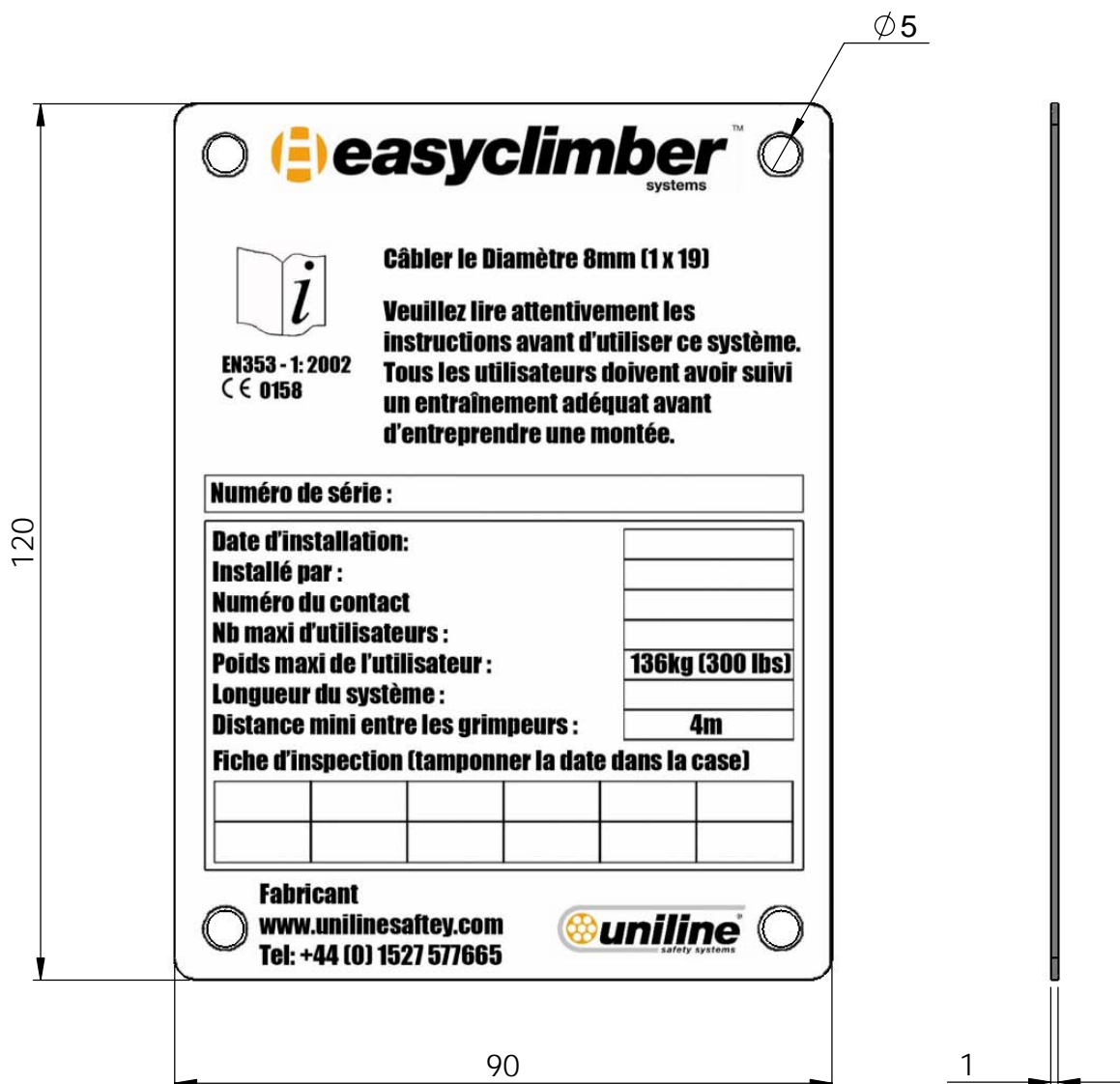
## Component Specification

Material	Aluminium grade 5251
Finish	Front: Sateen Anodized 25 Micron Coat + Seal. Rear: Milled Finish
Quality	100% Visual Inspection
Stength	N/A
Approvals	Complies with the requirements of EN365
Application	English Easyclimber Systems Only



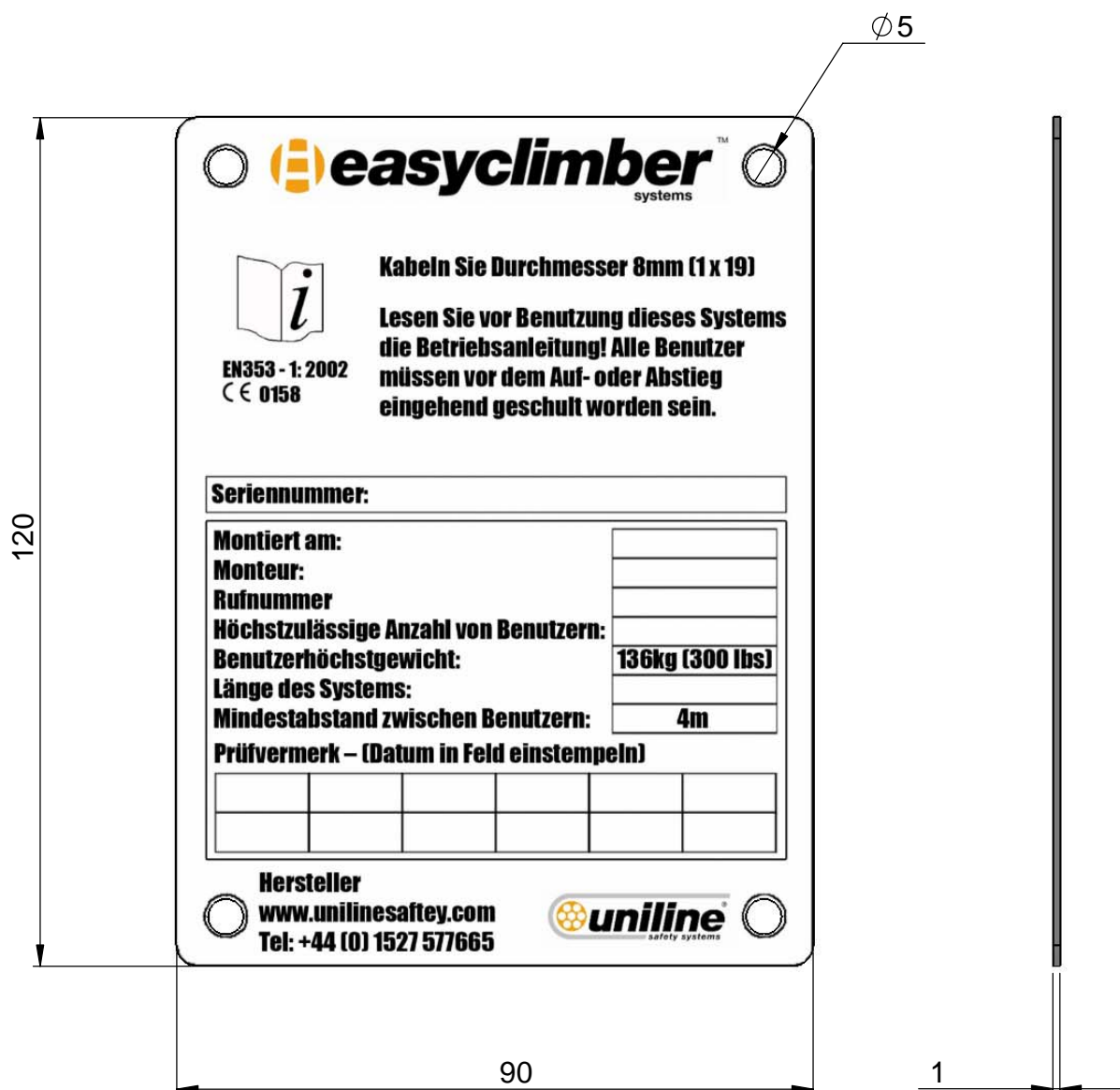
## Component Specification

Material	Aluminium grade 5251
Finish	Front: Sateen Anodized 25 Micron Coat + Seal. Rear: Milled Finish
Quality	100% Visual Inspection
Stength	N/A
Approvals	Complies with the requirements of EN365
Application	Dutch Easyclimber Systems Only



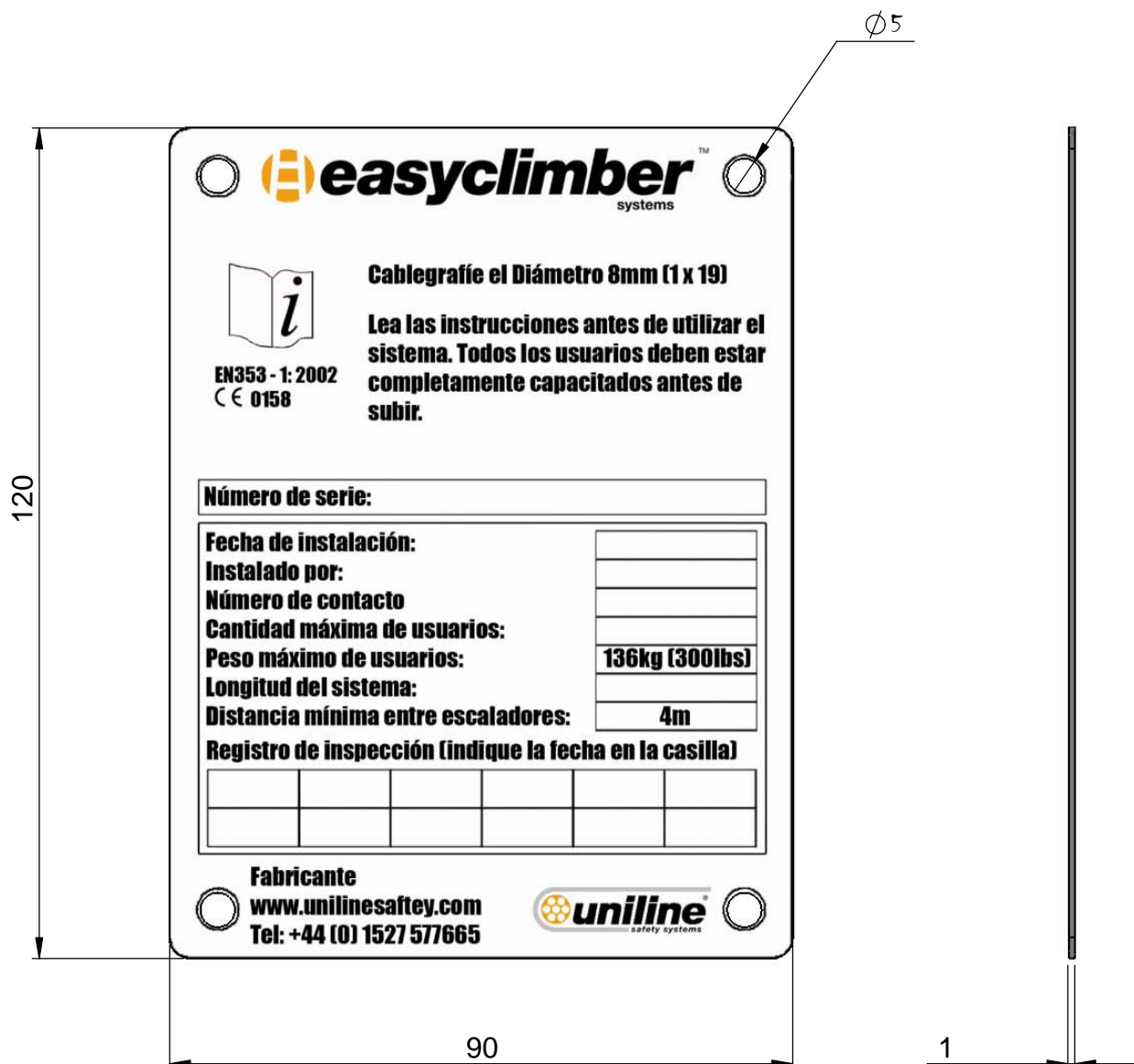
### Component Specification

Material	Aluminium grade 5251
Finish	Front: Sateen Anodized 25 Micron Coat + Seal. Rear: Milled Finish
Quality	100% Visual Inspection
Stength	N/A
Approvals	Complies with the requirements of EN365
Application	French Easyclimber Systems Only



## Component Specification

Material	Aluminium grade 5251
Finish	Front: Sateen Anodized 25 Micron Coat + Seal. Rear: Milled Finish
Quality	100% Visual Inspection
Stength	N/A
Approvals	Complies with the requirements of EN365
Application	German Easyclimber Systems Only

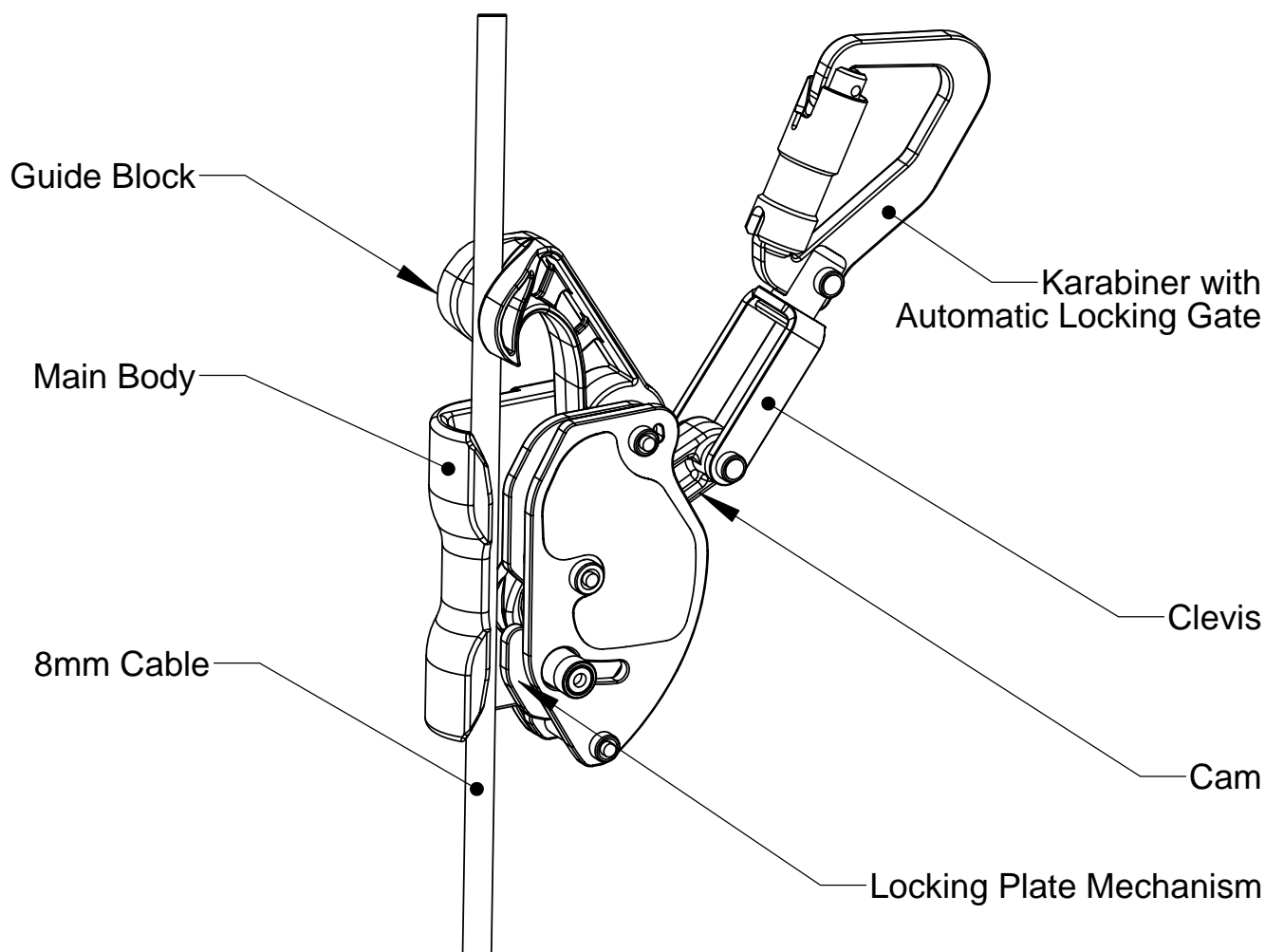


## Component Specification

Material	Aluminium grade 5251
Finish	Front: Sateen Anodized 25 Micron Coat + Seal. Rear: Milled Finish
Quality	100% Visual Inspection
Stength	N/A
Approvals	Complies with the requirements of EN365
Application	Spanish Easyclimber Systems Only

## Vertical Climbing Device

Part No: 010-669-600



## System Data

Only one user to be attached to the monkey at any one time  
 Max user weight 150kg (Only on systems incorporating energy absorber 020-669-302)  
 Max force on user < 6kN  
 Only for use on 8mm wire and system with energy absorber at top anchor

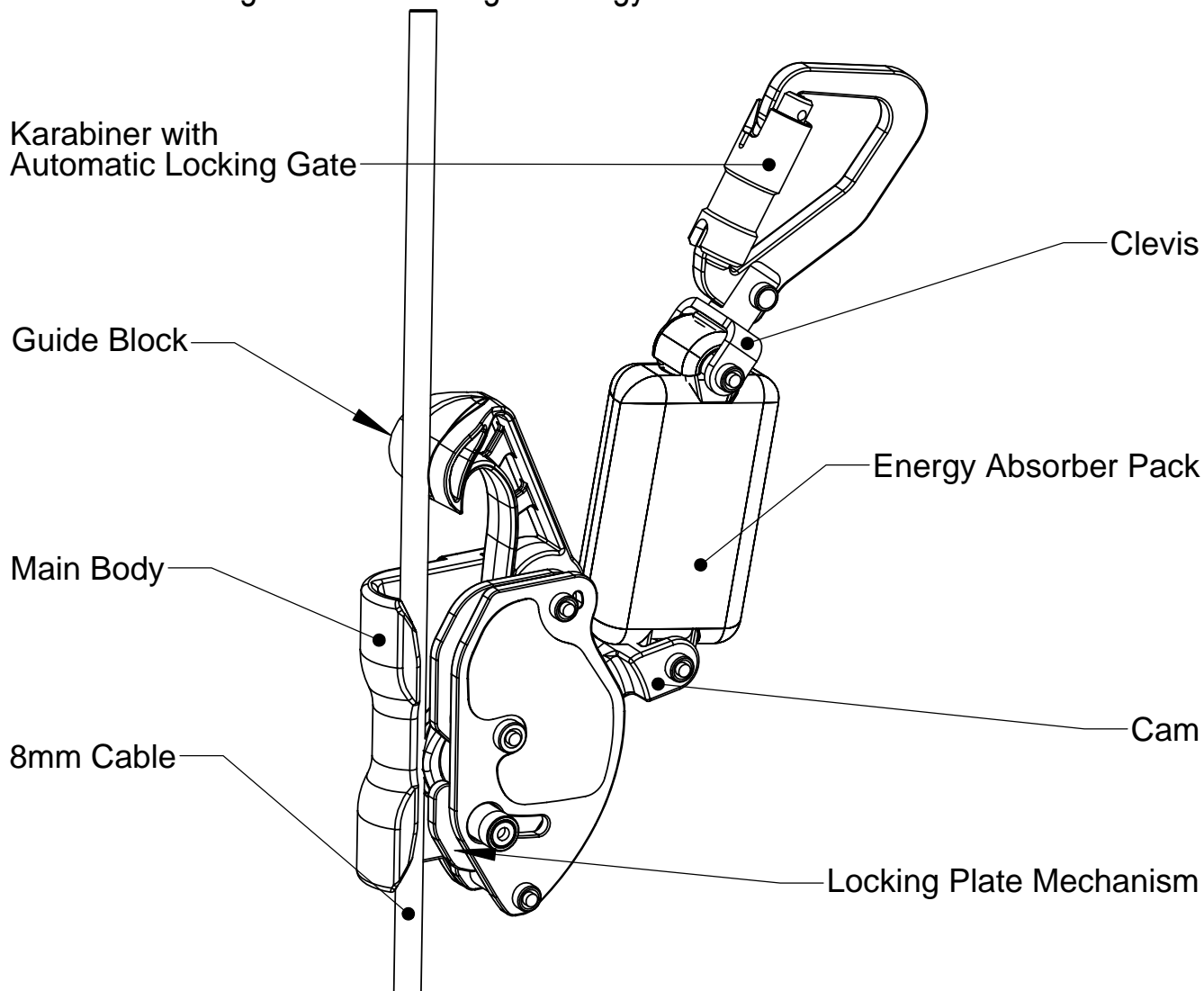
## Component Specification

	Main Body + Cam	Guide Block	Other Components
Material	Cast Stainless Steel	Nylon	Stainless Steel
Finish	Electropolished	Natural	Electropolished
Quality	X-ray / die pen inspected. 100% visual & functional inspection		
Strength	Minimum 15kN		
Approvals	EN353-1		

# Technical Datasheet No: 966

## Vertical Climbing Device c/w Integral Energy Absorber

Part No: 010-669-601



### System Data

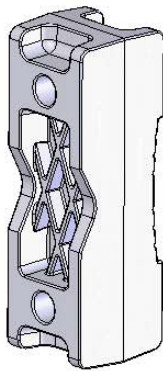
Only one user to be attached to the monkey at any one time  
Max user weight 136kg  
Max force on user in a fall < 6kN  
Only for use on 8mm wire

### Component Specification

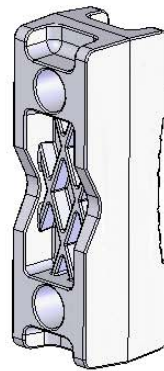
	Main Body + Cam	Guide Block	Energy Absorber Pack
Material	Cast Stainless Steel	Nylon	1900dN Polyester
Finish	Electropolished	Natural	Natural
Quality	X-ray / die pen inspected. 100% visual & functional inspection		Visual and Batch
Strength	Minimum 15kN		Min 22kN
Approvals	EN353-1		

## Common Mounting Bracket (B-Bracket) Fixing Details

Part No: 022-330-500 / 501



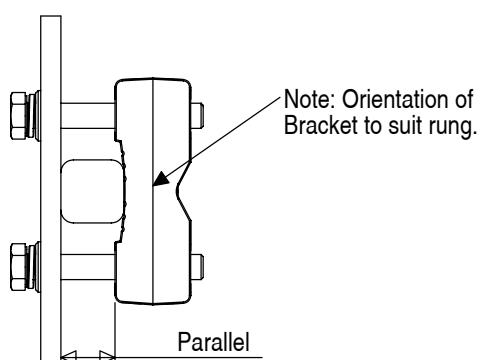
022-330-500 is a tapped mounting bracket ( M10). This bracket is common to all Easyclimber Assemblies.



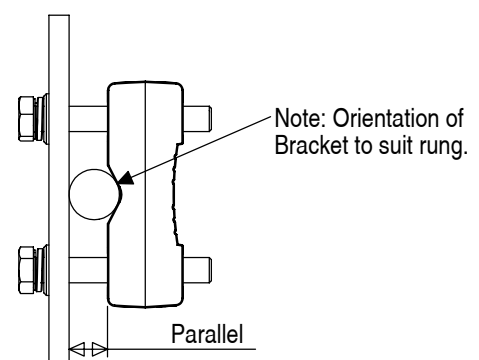
022-330-501 has clearance holes to suit M10 fasteners. This bracket is only found on systems incorporating an "In Line Energy Absorber". (Additional fasteners are supplied).

## Fixing Instructions

### Mounting on a Square Rung



### Mounting on a Round Rung



When mounting Easyclimber components onto a ladder you **MUST** always use a calibrated torque wrench. Refer to individual the datasheets for the recommended torque settings.

Torque the brackets (022-330-500 & 022-330-501) up evenly to ensure the bracket is pulled onto the rung parallel to the face of the assembly. Failure to do so, will stress the brackets and bend the mounting plates.